EOO 1.3:E25/1990/01

WHAT'S IN STORE
Communications Services Pilot Projects

The Communications Services Unit is currently working on three pilot projects for telecommunications in Arizona schools. They are:

•a project with IBM for data transfer between school districts and the Department of Education;

• a project with Tandem Computers and Apple Computers to set up a network;

•a project with NCR and Barrister International to establish a statewide electronic bulletin board for educators.

IBM
IBM has donated an AS400 minicomputer which will be used to transfer data between Madison Elementary District in Phoenix, Safford Unified District, and the Communications Services Unit. It will include enrollment data, a pilot of the Arizona Student Assessment Plan (ASAP) and administrative correspondence.

Tandem/Apple/Ungerman Bass
The Tandem/Apple/Ungerman Bass pilot project will transfer similar kinds of data, but will use different hardware and network configurations.

Phase I of this project will set up a network in the Arizona Capitol Mall linking 60 users with different computers equipment and operating systems. The project will focus on electronic mail, and broad band data sharing. This phrase is a "techie" term which means that databases on different operating systems will be accessible in a way that is transparent to the user. Phase I will last from January until June 1990.

Phase II will broaden the network established in the spring to include school districts throughout the state. This phase will last from August until December 1990.

NCR/Barrister
The NCR/Barrister pilot project will establish a statewide electronic bulletin board for educators. This new bulletin board will use equipment donated by NCR and software developed by Theodore Rosenbaum of Barrister International.

Mr.Rosenbaum has had a great deal of experience in setting up bulletin boards for rural areas. He will use this expertise to set up a user-friendly bulletin board which will support a variety of computers. A pre-configured disk will allow automatic access to the network. The subscription package will include a training video.

For further information, contact the Communications Services unit at 542-5022.

Using Technical Support Efficiently
What to Say When You've Got Them on the Line

If you need to call technical support for a software problem, here are some tips to make sure you and the person on the other end are speaking the same language.

Before Trouble Starts:

•Keep your registration information updated.

•Know your hardware configuration:
    -model
    -operating system version
    -memory capacity
    -hard disk capacity
    -external monitor and video card type
    -expansion board type
    -network type
    -output device type
    -other software

Before You Call

•Check the documentation first.

•Document systems precisely.

•Call backward: if you're using more than one software package at one time, go backward in the chain of software events to determine which company to call about the problem.

•Call from near your computer.

•Get to the heart of the matter.

•Give accurate, specific and explicit information.

•Write down the name of the person with whom you spoke.

Excerpted from "Power Tools: Technically Speaking," by Randy M. Zeitman. MacUser, November 1989.

Bits. . . . . . .

China has the largest educational television operation in the world. One million students receive instruction by satellite through 5,000 earth stations. China also will launch its own satellite in 1989 (purchased from Hughes), and will be in a position to greatly expand its activities.

-Distance Education Network Report

India broadcasts six hours of instruction by satellite daily; is planning to build its own hardware, both space and ground segments; and anticipates at least 10,000 VSAT terminals operating in the future.

-Distance Education Network Report

Indonesia currently has two satellites in operation with a total of 48 transponders. Thirty thousand students participate in their Open University as well as a rural program for agriculture and family planning.

-Distance Education Network Report

2

MULTIMEDIA TAKES OFF!

Interactive Multimedia Helps Students Make the Connections Critical to Learning

Although many of the concepts behind multimedia are part of the educator's acknowledged vocabulary, new multimedia technologies are both exciting and more difficult to comprehend than earlier teaching tools.

What is Multimedia?

One definition of multi-media is "the integration of video, sound, text, graphics, and animation under the control of a computer." The technologies that the computer might interact with are:

- video discs and CD-ROM's
- digital scanners
- digital audio
- Hypercard software

What are These Technologies?

Video discs and CD-ROM discs are laser discs which contain software, video, and audio information. They are accessed by a laser disc player cabled to a computer.

Digital scanners allow users to digitize images or text from paper. The digitized images are stored in a computer and used in conjunction with graphics or word processing software to enhance documents or presentations.

Digital audio allows users to digitize sounds captured by a MIDI musical instrument or microphone. The digitized sounds are stored in the computer and manipulated with software in much the same way as digitally scanned images.

Hypercard software is a tool for interacting with information. It can be used to organize and manipulate information stored as text, graphics, sound, animation and video.

It provides links that connect facts and ideas sequentially and non-sequentially, providing a structure that makes accessing large amounts of information manageable as well as engaging.

How Can Multimedia be Used in the Classroom?

Research conducted by the The Center for Children and Technology has identified many applications in the classroom for multimedia. Cited below are three:

1. As a teacher presentation tool similar to the current use of common A.V. tools like slides, film strips, and video programs.

2. As an informational database for whole classes, small groups, or individuals. The database allows students to quickly and easily access large bodies of information. This model permits the teacher to move from the role of knowledge provider to manager of the instrctional environment.

3. As a tool for student generated presentations and reports much like the traditional research paper.

Multimedia enables students to link data and ideas and make the connections critical to learning. By integrating text, graphics, sound and video, multimedia technologies address differing learning styles and needs. By providing a truly interactive learning environment that students can explore and add to, students can become actively engaged in the learning process.

Adapted from "Multimedia Takes Off!" by Peg La Rose, Computer Chip, Kyrene School District.

3

SATELLITE LINK

••••••••••••••••••••••••••••••••••••

•**"Technology Update For Educators"**
January 31, Feb. 21, March 14, 1990
3:45-5:45 PM Central Time
cost: $300 for series.

•**"Microcomputers and Science Education"**
March 22, March 29, 1990
3:45-5:45 PM Central Time
cost: $100 for series.

•**"Improving Teaching at a Distance"**
April 5, 12, 19, and 26, 1990
3:45-5:45 PM Central Time
cost: $400 for series.

The subscription fee includes taping rights and one set of handout materials. Special pricing for multiple sites is available. The programs will be broadcast on C-Band, and also are available by videotape purchase.

For more information, contact:
Office of Education Extension
Oklahoma State University
108 Gundersen
Stillwater, OK 74078-0146
(405) 744-6254

Arizona EdLink